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Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

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## Original Communications.

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### THE PATHOLOGY OF INEBRIETY,

AND THE IMPORTANCE OF ITS EARLY RECOGNITION AND  
REPRESSION IN ITS INCIPIENT STAGES.\*

BY EDWARD C. MANN, M. D.

*Physician to Sunnyside, a Private Hospital for Nervous and Mental Diseases, Inebriety,  
and the Opium Habit.*

In considering the subject of the *pathology of inebriety*, we must look for a moment primarily at the complexity of the nervous system, its manifold functions and its extensive distribution. We have the *cerebro-spinal system*, consisting of the encephalon, the spinal cord, and the encephalic and spinal nerves, and the *organic system of nerves*, consisting of the pneumogastric or vagus nerves, and the great sympathetic system including the vaso-motor system of nerves. In inebriety the primary morbid changes are not in the nerve elements themselves or in the interstitial connective tissue of nerves, except in those who inherit a structurally degraded nervous system, but it is initiated by altered quality of blood and secondary disturbance of nerve function. The interference with the proper

\*Read at the Annual Meeting of the New Jersey State Medical Society at Atlantic City, June 13, 1883.

and well-balanced working of the nervous system in inebriety depends primarily upon the supply of blood to the different nerve centers being neither definite in amount or uniform in quality. The proper nutrition of such centers and their normal molecular mobility is at once disturbed, and the maintenance of the accustomed degree of excitability in the different nerve centers is interfered with, and we get at once an exaltation, diminution or other perverted activity of the whole nervous system. The variations taking place in the nutritive condition of the nerve centers involve not only an altered action in that part, but a perverted functional activity of all other related parts. Thus in inebriety we get the most varied grouping of abnormal phenomena traceable to altered action in the nervous system, and having for a starting point some perverted functioning of one or more nerve centers. We have, in inebriety, morbid conditions of a progressive type ending in special forms of atrophy and degeneration, showing themselves more especially in the nerve cells of the brain, spinal cord, or sympathetic ganglia. Clinically, in the wide and varied phenomena of inebriety, we meet with perverted sensation and perception; perverted emotion and ideation; perversions of consciousness; perversions of motility; nutritive or trophic changes; perverted visceral actions. In the class of *perverted sensation and perception*, we have the special senses interfered with. In the class of *perverted emotion and ideation*, we have a long range from mere emotional display to actual insanity. In the class of *perversions of consciousness*, we see drowsiness, stupor, and coma. In the class of *perversions of motility*, we see tremors, twitchings, spasms, both tonic and clonic, and also, co-ordinated spasms, as in the epileptiform attacks of inebriates, paralysis, and defective co-ordination of muscular acts. In the class of *nutritive or trophic changes*, we meet with degeneration of brain tissue itself, inflammation and congestions of the lungs, or as hemorrhages into these organs, blanching of hair, and altered pigmentation of the skin. In the last class of *perverted visceral actions*, we see exalted activity of the stomach, intestines, bladder, and heart, and, in women, of

the uterus. Inebriety is a disease caused by heredity; by defective nutrition; by emotional shocks; by physiological crises; by visceral diseases, and by structural changes in the brain very often. We may have anemia of the brain in inebriety, with the blood in the capillaries deficient in quantity and defective in quality; we may have secondary atrophy of the brain; we may have hemorrhage into the substance or cavities of the brain; we may have hyperemia of the brain with increase of quantity of blood in the capillaries, with symptoms either of excitement or depression. We may have edema of the brain with infiltration of the brain and pia mater with serum, especially when the case of inebriety is associated with Bright's disease. The cerebral substance itself is not infiltrated. In these cases we see a slow diminution of mental power and motor force. We may have softening of the brain from vascular obstruction, depending on vascular degeneration causing thrombosis, or valvular disease of the heart causing embolism. The former in inebriates is the usual form, and it is associated with chronic alcoholism and Bright's disease. There are generally the premonitory symptoms of mental deterioration, numbness, pains in the limbs, and pains in the head, in the brain-softening of inebriates. Subsequently we see mental dullness, defective perception, drowsiness, loss of memory, slight delirium, emotional attacks, headache, articulation and hand-writing bad, the delicate motor acts badly performed, and loss of physical power. Dementia may end the scene.

Inebriety is a disease exhibiting certain essential psychic and physical signs. It is a disease in which the victims are all more or less irresponsible, as are the insane. It is a disease in which the tone and power of the nerve centers are lost. There is generally, and I believe always, could we get at the true family history, an inherited neuropathic constitution; but here, as in insanity, it is in the higher classes very difficult to elicit the whole truth from the relatives. It is a disease, perhaps more than any other excepting insanity, requiring for its cure *time*, and long-persistent hygienic influences to restore the normal

vaso-moter condition affecting the nutrition and circulation of the brain and nerve centers.

The importance of the early recognition and the repression of inebriety in its incipient stages has thus far received very little or no attention, even at the hands of those who have written extensively on the subject.

Inebriety is a psycho-neurosis, which either attacks an intact brain, or more frequently a brain not intact but predisposed to the acquisition of inebriety by hereditary or acquired vices of conformation or nutrition.

It has an early prodromic, curable stage. The same remarks, which in my writings on insanity I have applied to that disease, apply with equal force to the disease of inebriety, that there is an early, neurasthenic, equivocal state, differing but little from perfect sanity, but which is the earliest phase of mental alienation, and if recognized by the general practitioner, and promptly treated in this incipient stage, subsequent trouble might be averted. A very careful study and comparison of the two diseases of inebriety and insanity has shown conclusively that in both alike we have early premonitory symptoms which, unrecognized and unchecked, lead or lapse into active inebriety and dipsomania upon the one side and into insanity on the other. They are grave psychical symptoms, and should lead to an early diagnosis by an intelligent physician. As I shall show presently in detail, in this early stage of inebriety we have general malaise, impaired nutrition and assimilation; muscular atonicity changing the facial expression, neuralgia is present. There is often cerebral anemia, and there is mental depression and sleeplessness. There are profuse perspirations and a loss of the normal elasticity of the skin. There are periods of marked mental inactivity, alternating with a hyper-activity of the mental functions. There is physical and mental prostration, muscular feebleness, and mental dullness. There is, or may be, vertigo and confusion of mind also.

Inebriety to-day is a neurotic affection, preceded by a distinct



interval of morbid nervousness. In the American of to-day there is a greatly augmented susceptibility to the action of stimulants and narcotics. This is due to the increasing complexity of the nervous system and to the increased complexity of life. Our brains are finer in structure, more subtle in mechanism, and also more unstable than were those of our ancestors. The conditions of modern life, acting on our complex and excitable nervous systems, cause our increased nervous diseases, prominent among which stand inebriety and insanity. Given in a certain case an inherited neuropathic constitution and dipsomania will appear on the exhibition of the slightest exciting causes. This constitutes an important feature of the disease.

Cosmical influences operate with great readiness in producing an outbreak of the disease in persons thus predisposed to it. The phenomena of nervous exhaustion which one who inherits this neuropathic constitution generally, according to my investigations in inebriety, exhibits before the actually developed disease, are certain functional disturbances of the whole bodily organism. There is a relaxation of the general muscular tone which gives rise to partial or total loss of voice, generally partial, the chest tones being weak; relaxation of the facial muscles, giving the face an enervated, spiritless appearance; relaxation of the ocular and orbital muscles, giving a tired, worn-out expression to the eye and this same relaxation of the general muscular tone may produce involuntary defecation and micturition. There is cardiac stimulation and palpitation, the palpitation being the more prominent. Irregular action of the heart best expresses this state I refer to. If you command the individual to hold out his hand and arm perfectly straight before him, with the palm downward, you will perceive that the hand trembles visibly. This is a very good test for the general relaxation of muscular tone all over the body, and a very simple one. The arm is to be held out straight from the shoulder. There is vocal tremor; trembling of the legs, especially about the knees; atony of the digestive, excretory and

other organs, producing a general malaise; idiopathic fits of perspiration and rigors. There is great irritability of the cerebral cognizant centers, evinced by fright at slight causes. These persons have fears of inability to perform certain acts, and the fear of involuntary performance. It is the fear of inability to speak loudly which is at the root of the phenomena of aphonia exhibited by neurasthenics who are destined to become inebriates; to articulate clearly, which gives rise to the vocal tremor; fear of not keeping hand or head steady, which makes them tremble. Respecting their cerebral actions, they are afraid of not being able to collect their thoughts; if brain workers, that they shall not write or speak in eloquent language. There are muscular twitchings, a hasty, imperfect utterance, and a quick, agitated manner. If, from this simple state of neurasthenia or nervous exhaustion, our patient passes into the graver state of hysteria or hypochondriasis, according as it is a female or a male, we shall now observe more complex phenomena, which may or may not usher in the paroxysm of dipsomania.

There will be local pain, due to visceral disease. There will be pains referred to parts not diseased, due to transference of the nerve force or vascular disturbance of nerve centers. There is diffuse hyperesthesia, due to this vascular disturbance of nerve centers. There is defective functional action of viscera, due to reflex action. There are disordered muscular movements, due proximately to reflex action or vascular disturbance of nerve centers. Among the different forms of trembling occurring in the state of nervous exhaustion I omitted one peculiar feature, which is an inability to keep the head steady when walking. The head trembles only in an antero-posterior direction. In this first stage fear lest muscular and cerebral actions can not be performed effectually prevents their proper accomplishment.

Aside from heredity, excessive sexual indulgence, loss of blood, excessive mental and muscular exertion, or any painful disease may be the cause of the neurasthenia or nervous exhaustion which ends in inebriety. Excessive indulgence in tea

and coffee-drinking may also induce it (nervous exhaustion), owing to the overstimulation of the nerve centers by the active principles of the tea and coffee. We can tell by the tone of the tissues pretty correctly as to the state of vigor or weakness a person is in. If the brain cells are normal their function, that is, thought, is normal. Function depends upon cellular health. The heart, the spinal cord, and the brain all functionate abnormally in the neurasthenia of inebriety, and all the forms of fear of which I have spoken are the characteristics of debility of brain, due to general failure of the normal appropriating power of the brain. These morbid fears and dreads, these morbidly-colored perceptions, conceptions, and misconceptions, the timidity, irresolution, irritability of manner and speech, all foreign to a healthy person, are the essential psychic signs of the neuropathic condition of inebriates. There is a decided change from the normal standard in the manners of thought, feeling, and movement of these persons. There is mental and nervous instability and irritability analogous to that seen in the neurasthenia or nervous exhaustion preceding insanity, and the very similarity stamps indelibly the kinship of the two diseases to any unprejudiced observer. The psychic symptoms in both diseases are alike the symptoms of inadequate nerve nutrition, and in the brain centers there are instability, irresolution, timidity, dread, and fear, morbid and groundless suspicions, hallucinations and delusions, all abnormal, and not found in health. Positive hallucinations and delusions appear when the inebriety or dipsomania has become actively established.

What physician of experience has not witnessed, in the neurasthenia of the dipsomaniac and insane man alike, that change in the mental character in which irresolution has replaced former decision of character? The psychical timidity and manner are precisely the same in both diseases, and as active insanity or active dipsomania or inebriety appear well developed, all these psychical characteristics of the prodromic neurasthenia increase in degree. I would therefore insist on the existence of this

neurasthenic stage of inebriety as one of the most important points in the pathology of the disease, a stage which the general practitioner should regard as the danger signal of active dipsomania not far off, although *the irresistible craving for alcohol which constitutes the morbid condition of inebriety* may not yet have been actively displayed. Now is the time to prevent the neurasthenia of inebriety from lapsing into the actively developed disease.

The constant current of electricity, as centric galvanization and cerebral electrization will do much to antagonize the symptoms of this early stage, while attention to the mental hygiene, cod-liver oil, with the phosphates, strychnia, quinine, a combination of iron, phosphorus, zinc, and strychnia, the bromide of zinc and the chloro-phosphide of arsenic, are all indicated as the circumstances and symptoms of individual cases may indicate both to combat the disease and build up and restore the shattered nervous system.

The neurasthenia of cerebral syphilis is almost an unexplored field, but I am convinced that it frequently plays an important rôle in the production of inebriety. It has a peculiar set of symptoms, consisting of deep-seated headache of great intensity, with nocturnal exacerbation and of long duration, vertigo, mental dullness, temporary disorders of the special senses, momentary impairment of the intellect, recurring paralysis, epileptiform attacks coming on after the age of twenty-one years, and muscular feebleness. These are a perfectly diagnostic set of symptoms when associated together, and I have known them more than once, in professional and business men, to be the direct cause of inebriety and also the opium-habit.

If active treatment of the neurasthenic stage of inebriety is delayed, the practitioner will soon have the opportunity of studying the natural history of a case of dipsomania. If an observant man, he can see clearly this initial stage of the disease, if the case is brought to his notice, manifesting itself in the mental movements, in the voice and walk, and in the functional nerve irritability and the inertia of his patient, and

this in the earliest and most curable stage of the disease. In those inheriting the neuropathic constitution the phenomena may be observed from earliest infancy, commencing with the sleeplessness and night terrors and emotional outbursts of early childhood, the train of morbid phenomena becoming gradually intensified as the child grows up, and becoming well marked at the 'age of puberty, when a disposition to recurrent mania or its analogue, recurrent fits of inebriety, may appear. These are vaso-motor neuroses with recurrent cerebral hyperemia, the outward expression of which state may be either the development of a true periodic insanity or a periodic dipsomania, as the case may be. The intellectual centers will be involved in either case in all probability. The phosphates and cod-liver oil in the form of hydroleine should be fed to such children from earliest childhood as a religious duty, so that nature, if possible, may restore herself to the normal standard, and overstimulation of the brain in too premature education of such children be avoided with like care. If the unstable brain tissue is injured in such children by a forcing process of education, insanity or inebriety will prove surely the avenging Nemesis of such folly.

The great danger to-day to our children as Americans is, that the too great activity and susceptibility of the nervous system, by modifying the nutrition of the brain centers and stimulating their growth unduly, tends to induce brain exhaustion and brain-tissue degenerations. This is particularly true of the refined and cultivated classes, where, by premature and stimulating processes of education, an elaboration of cerebral structure is forced and the functional activity of the brain in children hastened, overstraining the brain centers at their nascent period, thereby dwarfing and weakening them, disturbing the balance of mind by seriously interfering with the natural sequence of the evolution of the brain centers, and preparing the child to fall an early victim to some of the modern nervous diseases.

Careful building up of the nervous system and a careful direction of the mode of life, and observance of the rules of mental hygiene, may, even in children who inherit the neuro-

pathic constitution, restore functional energy, antagonize the morbid psychosis, build up the nervous centers, and induce at least a moderation, and perhaps a total diminution of the neuropathic condition that the child inherited.

Preventive medicine is a wide field for study, and by such study dipsomania and insanity are to be prevented and oftentimes stamped out.

I have endeavored to be as brief and concise as possible in these remarks on the pathology of insanity and the importance of the early recognition and the repression of inebriety in its incipient stages. The fully developed disease exhibiting the great nervous irritability and restlessness, the unnatural sensations, the uncontrollable desire for alcoholic stimulants and the disposition to frequent fits of intoxication are familiar to all here present. The great salient point to me in the pathology of the disease—inebriety—is, there exists a departure from a healthy structure of the nervous apparatus, and that it is this abnormal condition of the centric nervous system demanding stimulants that is essentially the disease; that inebriety and dipsomania are governed by the laws which govern mental diseases generally. How far and to what degree the phenomena of inebriety are controlled by cosmical influences, such as electrical phenomena, lunar attractions, velocities and directions of winds, geological formations, elevations above the sea level, the approaches of storms, barometrical changes and temperature, are most interesting questions, for the complete elucidation of which time is yet required: the diatheses and cachexias, reflex excitability, previous diseases, traumatic causes, overstimulation of the brain in school-children, puberty, the menopause.

The question as to whether there are *any* cases in which the nerve tissue is sound and free from defect; what per cent of the higher and middle classes, as compared with the same number of the lower and laboring classes, exhibit the disease of inebriety; the effect of menstruation upon the disease, are all very interesting points in the pathology of inebriety upon which I should like to dwell, did time permit. Accumulated results of



experience indicate, however, decisively, that the propensity for drink in this disease of inebriety, when under the influence of exciting causes, arouses the appetite, overcomes the will, blunts the moral sensibilities and makes every thing else subservient to its demands. The will-power of the individual is overborne by the force of the disease precisely as in mental disorder; and just as the periodically insane man has free intervals of sanity, just so does the dipsomaniac have free intervals of sobriety when the irresistible craving for stimulants passes away, to return again, however, with the next paroxysm unless the proper remedial measures are applied. The great medico-legal question, and one which needs to be clearly demonstrated to the judiciary, is this: If this morbid craving for stimulants is clearly traceable to a brain condition, what is the mental responsibility of an inebriate? To me, partial responsibility in the disease of inebriety is as clearly demonstrated as any other mental condition.

The study of the pathology of inebriety would lead us, if carried out to its fullest extent, through inquiries into the physiological action of alcohol with its stage of vascular nervous excitement, the cerebro-spinal changes induced, the fall of animal temperature, the collapse of the volitional nervous centers, modification of animal function and structural degeneration. The study of the functional disease from alcohol would reveal the alcoholic dyspepsia, the sensory disturbances from alcohol, the vascular changes in the skin, alcoholic thirst, and early systemic failure. The organic disease from alcohol would show us fatty and diseased hearts, weakened and diseased blood-vessels, alcoholic phthisis, diseases of the liver and kidneys, diseases of the eyes, insomnia and serious deteriorations of cerebral structure itself, which often ends in mental disease. The nervous diseases would reveal, aside from insanity, epilepsy, paralysis, and delirium tremens. The epilepsy which occurs in offspring, as the result of inebriety in the parents, reveals clinically epileptic idiots whose intellectual faculties have never been developed, epileptics who are imbecile or demented, epileptic

maniacs who, without obvious disorder of the mind, when epileptic fits are coming on are irritable, morose, malicious, and dangerous, and sometimes perpetrate fearful crimes, and finally a class of epileptics whose intellects are not impaired. The pathology of these epilepsies would appear to depend upon failure of the proper nutrition of cerebral tissue of the fetus, so that during embryo life the brain of the infant undergoes pathological changes which induce both deficient moral power and epilepsy. The ultimate condition of mind consists in the due nutrition, growth, and renovation of the brain cells. Inebriety produces a change in the chemical composition of the cerebral cells from the standard of health, which is the foundation of organic disease, as it prevents and interrupts healthy function. Irritation, exhaustion, and depression, apoplectiform and epileptiform attacks all appear, and subsequently atrophy and induration of the brain and thickening and infiltration of the membranes. The nerve cells may also be the seat of granular degeneration. We may have chronic meningitis with impairment of memory, dullness of intellect bordering on dementia, tottering gait, hesitating, slurring speech, and other symptoms indicative of gradually progressing paralysis. Slight attacks of cerebral hemorrhage play a very important part in the production of premature mental decay in inebriates, and they are directly due to hypertrophy of the left ventricle of the heart, chronic diseases of the kidneys, and the degenerated cerebral arteries. There is a sub-inflammatory irritation which causes the arteries to lose much of their elasticity and to become permanently wider, longer, and more tortuous. The strong left ventricle and inelastic arteries combine to prevent the wave of blood sent to the arteries from being properly equalized, and consequently the smaller arteries of the brain, which are normally thinner than the arteries of the other parts, and which are degenerated, receive the impulse from the heart's jerks, and being thus diseased and fragile—perhaps dilated and aneurismal—give way. From the date of such an occurrence the inebriate is an altered man and never recovers himself.

Finally I would speak of the great importance of the recognition of the mental condition that in inebriates is the precursor of decided insanity. I have had the opportunity of studying carefully several such cases who had from time to time entered my private hospital for treatment, and many of whom I have been so fortunate as to restore to home and society. The clinical manifestations which I have observed in these cases have been depression, unwonted excitability, disregard of the minor proprieties of life, a change coming over the warmest affections, quick changes and rapid transitions in the current of the feelings, sleeplessness, and a complete change of character and habit; the person meanwhile entertaining no delusions, but occasionally losing his self-control, the general acts and manner at such times being strongly expressive of the inward emotion. There are intervals of perfect calmness and self-control, during which the person clearly discerns his true relations to others and even perhaps recognizes the influence which the incipient disease exercises over his feelings and actions. Finally, in those cases where insanity appears, we see the utter downfall of the intellect manifested by the fury of mania, or the moodiness, suspicion, depression, and impulses toward self-destruction or melancholia. All these are the successive links forged in the chain of the insanity of the inebriate, the study of which is full of interest not alone to the student of mental pathology, but to everyone who desires to lead the wandering mind out of the darkness and mazes of disease back into the light of reason.

BROOKLYN, N. Y.

SAYRE'S SHORT SPLINT IN INTRA-CAPSULAR  
FRACTURE OF FEMUR.

BY W. M. FUQUA, M. D.

I have recently had very gratifying results from the application of the weight and pulley in a case of intra-capsular fracture at the neck of the femur, with the effect of inducing not only great comfort to the patient, but also the rapid absorption of the synovial accumulation within the joint. Subsequently the limb was adjusted with Physic's modification of Dessault's splint, the patient making a good recovery in eight weeks, with useful joint, and but little shortening. It occurred to me while treating this case, that it was not requisite to confine the patient to bed longer than ten or fifteen days, and after this to firmly adjust a well-fitting "*Sayre's short splint*," and place the patient on his feet, having first lengthened the sound leg by the addition of an inch cork sole. With this appliance and a crutch and cane the patient walks about just as in a case of chronic disease of the coxo-femoral articulation. If the tendency to eversion, or possibly to inversion be great, then "*Sayre's long splint*" would be required, night extension to be made by weight, and the splint to be used during the day.

I am clearly of the belief that the "do-nothing" plan of the older surgeons, sanctioned by modern authority, is wrong, and should be abandoned. The expectant plan, that had expression in supporting the limb with pillows, etc., grew out of the idea that any plan of treatment looking toward osseous union was fallacious. Experience has shown, however, that bony union can be had, and I take it that all diligence should be used in endeavoring to bring about this result. From a great want of similarity in the prominent symptoms in different cases, viz., degree of shortening, eversion or inversion, crepitation measurement, preternatural mobility, etc., I am convinced that many of these fractures are through the inter-tro-

chanteric lines, and therefore, amenable to the reproductive influence of the periosteum.

Were it true that no union was possible, the exhaustion and bed-sores incident to confinement of long duration, and possibly with synovial or purulent accumulation, should, I think, lead us to try this proposed plan. So far as I am informed, I am the first to suggest Sayre's splint for this grave fracture, and indulge the hope that it may prove to be of good service, not only in enhancing comfort but in securing bony union.

HOPKINSVILLE, KY.

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## A COCKLE-BURR IN THE WINDPIPE.

BY J. N. OUTEN, M. D.

Seeing in the March number of the *AMERICAN PRACTITIONER* an article on "Foreign Bodies in the Air-Passages," leads me to report the following case, which I met with many years ago:

In 1854, a boy, aged seventeen, while cutting corn-stalks in a field, made the, to him, pleasing discovery that he could whistle through his windpipe while keeping his mouth open. He was practicing his new accomplishment as he pursued his work, when a cockle-burr was knocked into his larynx by a lick from his hoe. The usual symptoms instantly followed. A physician saw him the next morning, but for some reason made no effort to remove the burr. Some hours after the patient was brought to me. Thinking the foreign body might have lodged just under the epiglottis I introduced my finger down to that point, and became at once satisfied that I had touched the burr with the tip of my nail. The maneuver cut off what little air the boy had been getting, and he sank seemingly lifeless to the floor. When he sufficiently recovered his breath I repeated my exploration with the result this time of giving the burr a lucky turn and fortunately causing it to be expelled. Almost immediately after the patient could speak in a whisper. He soon

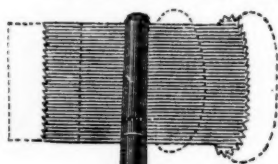
regained his full voice and was well. A short time after this I saw the report of an almost similar case made by the late Prof. Paul Eve, of Nashville, Tenn.

HICKMAN, KENTUCKY.

### COWGILL'S HEY'S SAW.

BY WARWICK M. COWGILL, PH. B., M. D.

I wish to call the attention of the profession to a modification and, I hope, an improvement I have made on Hey's saw.



Hey's saw, while not an instrument of daily use is, notwithstanding, a very important instrument in certain operations—particularly in those upon the cranium. It is in especial regard to these operations the modification is made.

In operating on the skull with the old Hey's saw, it has one decided fault: that is the length of blade from saw teeth to the attachment of the handle. The length of this blade is something over twice the average thickness of the skull bones. This fault of the old instrument makes its use fraught with danger. Having sawn through the bone it is almost impossible to keep it from slipping through the opening made, and thereby injuring the meninges and brain.



To obviate this fault and make the instrument one of much less danger, I have so constructed it that the blade, instead of being fixed in its position to the handle, works up and down in a slot, which is adjusted by a screw in the handle. By this means the length of the



blade can be regulated to the thickness of the bone to be sawn through, making it impossible for the blade to slip through and injure the brain. In a few words—it is to accomplish the same advantage for the saw that Gault's conical trephine has accomplished over the old cylindrical trephine.

I think the field of usefulness for the instrument by this modification is much widened. The blade can be lengthened as well as shortened, of course. This makes it a very convenient instrument in working in deep cavities in resection and also in removing sequestra.

The instrument is made by George Tiemann & Co., New York, and by Tafel Bros., Louisville, Ky.

PADUCAH, KY.

VOL. XXX.—14

## **Reviews.**

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**Student's Manual of Electro-Therapeutics.** Embodying Lectures delivered in the Course on Therapeutics at the Woman's Medical College of New York Infirmary. By R. W. AMIDON, A. M., M. D. New York: G. P. Putnam's Sons, 27 and 29 West Twenty-third Street. London: 25 Henrietta, Covent Garden. 1884.

In the foregoing volume the author has embodied what was much needed by both the general practitioner and student, an epitome of such knowledge of electricity as is required in the treatment of disease. He gives that amount of the subject of electro-physics necessary to the proper understanding of the construction and use of medical batteries; he describes the "commoner gross physiological effects of electricity;" sketches the manner of electro-diagnosis, and "the kind of electricity and its application in different pathological states." And he has done all this well and in small space.

It goes without saying that, coming from the press of the Putnam Sons, the mechanical features of the work are all that could be desired.

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**The Hip and its Diseases.** By V. P. GIBNEY, A. M., M. D., Professor of Orthopedic Surgery in the New York Polyclinic, etc. 8vo., pp. iv. 412. New York: Bermingham & Co. 1884.

Thirteen years of conscientious and laborious application given by Dr. Gibney to the study of hip-joint affections, in a hospital especially set apart for the crippled, has led him very properly to embody the results of his observations in a book. During the period stated the author has seen more than two thousand cases of hip-disease, and of most of these he has kept a minute record. With such unsurpassed, if not abso-

lutely unequaled, opportunities for the practical study of the affection of which he treats one is naturally led to look for much from the writer; and it is a pleasure to say that the author has produced a work which is in many respects the most instructive volume on diseases of the hip yet given to the public.

This much in praise.

When a second edition is called for, which we predict will be soon, Dr. Gibney will, we are sure, be able, without the suggestive pen of the reviewer, to see and correct defects in style and errors in English, besides many details which could well be omitted in the present volume. The externals of the work should also be made to correspond more nearly to its contents.

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**Practical Manual of Diseases of Women and Uterine Therapeutics.** For Students and Practitioners. By H. MACNAUGHTON JONES, M. D., M. C. H., F. R. C. S. I. & E. New York: D. Appleton & Co., Bond Street. 1884.

It is positively refreshing in these days of professional book-making to meet an author who adds to a practical knowledge of his subject the power to present it in a condensed and perspicuous way. If only such men wrote, the number and size of medical books would be strikingly small.

The author of the manual before us has long been known as a man of a practical and very independent turn of mind, and capable of expressing himself in a forcible way in the best English. The present work possesses the qualities which would be expected in a writer of such parts. We commend it as filling the daily needs of the general practitioner, and being in every sense a most valuable addition to his library. Bearing the imprint of the house of Appleton & Co. affords ample guarantee that the paper and press-work are all that could be desired.

**An Introduction to Pathology and Morbid Anatomy.** By T. HENRY GREEN, M. D., London. Fifth American, from the sixth revised and enlarged English edition. With one hundred and fifty engravings. Philadelphia: Henry C. Lea's Son & Company. 1884.

We make a note of the appearance of the fifth American edition of this work, not to criticise, but rather to state that it has undergone careful revision, and in the main, at least, has been brought up to the times. Had the chapters on tuberculosis and phthisis been as well done as are those on vegetable parasites, the etiology of disease, tumors, pyemia and septicemia, contributed by Mr. Stanley Boyd, we should pronounce the volume unequaled in its way. As it is, we know of nothing superior to it for students and the general practitioner.

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**Medical German.** A Manual Designed to Aid Physicians in their Intercourse with German Patients, and in reading Medical works and publications in the German language. By SOLOMON DEUTSCH, A. M., Ph. D., author of *Letters for Self Instruction in the German Language*; *Practical Hebrew Grammar*, etc. New York: J. H. Vail & Company, 21 Astor Place. 1884.

To such physicians as are studying the German language, or who practice among Germans, this book will prove a real help. Besides containing a very large collection of words relating to every department of medicine, it gives imaginary conversations between patient and physician, and concludes with a carefully prepared German-English index.

It is made the handier by being bound in flexible covers.

### **Clinic of the Month.**

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ON ABDOMINAL SURGERY.—Lawson F. Tait, Esq., F. R. C. S., delivered an address on this subject before the Canadian Medical Association, at Montreal, in April last, from which we extract the following: The first operation for the removal of an ovarian tumor was performed unwittingly in 1701, in a Scotch village, by Robert Houston, who began a tapping, and finished by making a successful ovariectomy. It was not until 1809, eighty-six years after Houston's case was published, that his example was imitated, and even then it was not in Europe, but in the fresh soil of the backwoods of Kentucky the young seedling obtained its first full growth, and from that time and from this country dates the history of abdominal surgery. But how slow the growth! In 1863, I heard my master, the Professor of Surgery in the University of Edinburgh, settle all this vast field of human progress in the few words, "Abdominal surgery is abominable surgery." Syme, the greatest surgeon by far with whom I have ever come in contact, shared the views of his colleague in this matter, and I fear that in both of them the sentiments originated far less in the merits of the question before them than in their mutual dislike (almost the only sentiment they had in common) of John Lizars, who, having read McDowell's manuscript when it was sent to John Bell, was immensely struck by the success of the heroic Kentuckian, and was desirous of following his brilliant example. Most unfortunately for humanity, the success of Lizars was of a very doubtful kind, and abdominal surgery had to wait for the advent of Dr. Charles Clay and Mr. Isaac Baker Brown. The story of the latter brilliant and unfortunate surgeon is now a thrice-told tale, and I can only repeat here what I have said at length elsewhere, that his disastrous downfall was a misfortune for humanity, delaying, as it did, the

progress of abdominal surgery for fully a quarter of a century. The whole question of this progress lay in the peculiarly narrow issue as to whether the pedicles of ovarian tumors should be dealt with inside the peritoneum or outside it. Here again the new country was first in the race, for between 1820 and 1830 the decision in favor of the intra-peritoneal treatment was given in America in such a way that the question ought never to have been reopened. The arbitrament of abdominal surgery between 1866 and 1876 was left in the hands of a man still living, and he carried through his practice a mortality so heavy as to be absolutely prohibitive of fresh enterprise. Mr. Baker Brown left off practice in 1866, with a mortality of ten per cent with the cautery; while, after operating on a thousand cases, Sir Spencer Wells had a mortality of twelve per cent with the ligature in the last hundred; and over the whole thousand the mortality was exactly twenty-five per cent. With such results as these, the marvel is not that the conservative surgeons cried out twenty years ago that the craft was in danger, but that the removal of ovarian tumors ever became an accepted operation at all.

As I have said over and over again, and as I shall never tire of saying, to Keith is due the whole credit of the modern development of abdominal surgery, and it has ever seemed to me specially hard that while wealth and a title have been the lot of the man who had done nothing but obstruct progress, to the author of our present proud position nothing has come save a good deal of misrepresentation and abuse.

In 1878, the doctrines and practice of Lister, after twelve years of preaching on the part of their author, had penetrated to London, and were taken up by Sir Spencer Wells and his assistants. I had practiced all the details in their ever-varying form, as recommended by Mr. Lister, from 1866 onward, and gave them up, one after the other, as I found they disappointed and hindered me. Finally, I gave the spray and its adjuncts a long and complete trial, a trial far more careful in its details than any thing I ever saw elsewhere, this trial extending over three years. I have published in detail the disastrous results of this experi-



ment, and at last I gave up all these unnecessary dangers, and since January 7, 1881, my practice has been entirely free from all these details. Since then my example has been followed by Dr. Keith, Dr. Bantock, and by my colleague, Dr. Savage, and the only surgeon now who uses the Listerian details for abdominal surgery is Mr. Knowsley Thornton. He still claims for Listerism the most of our present progress, in spite of the fact that Keith, Bantock, Savage, and myself have far better results without Listerism than Mr. Thornton has with it. Mr. Thornton went so far recently, in a communication to Dr. Bigelow, which that gentleman published, as to say that his (Mr. Thornton's) bad results in hysterectomy were due to the fact that in this operation the Listerian details could not be effectually applied. But the facts of the practices of Mr. Thornton and Dr. Bantock, the two surgeons to the Samaritan Hospital, settle the question when they are contrasted. Mr. Thornton uses the Listerian details for hysterectomy as well as he can, and in twelve cases he has had five deaths, while Dr. Bantock does not use the Listerian details at all, and in twenty-two cases he has had only two deaths. The explanation of the difference will be evident to every one who has seen both of these gentlemen operate. To see Dr. Bantock do a hysterectomy is a lesson in surgery, and one from which I learned a great deal.

To see my own work, I have been honored with the visits of a large number of surgeons from this continent, some of whom I see here now. I believe they one and all came with the belief that they would find I had some secret antiseptic agent, the use of which was the explanation of my success. If I have such an agent, it must be of universal existence in nature, for I have made some of my visitors take water from the tap and put it into the basins for the sponges and over the instruments and into the abdomen. I have made them drink it, and have offered it to them for analysis, and so far, I have not been detected in any exercise of magic. My visitors always ask to what I attribute my success, and I answer that I can not tell. They frequently suggest that it is climate, and my answer is that our

climate is the most variable and uncertain, the worst in the world. It is not fresh air, for the great majority of my operations, and always the worst, are done right in the middle of a large manufacturing town.

If I may formulate my own answers, they would be briefly to this effect. I have given up my life to this work and I engage in no other kind of practice; therefore, I have a constant weekly experience of five or six of these operations, sometimes as many as eight or ten. I pay the most minute attention to every detail, and maintain an absolute rule of iron over my nurses and patients. I will not, if I can avoid it, operate in a private house, for there I have no control over either nurse or patient, still less over foolish friends. I can best illustrate the extent to which I carry discipline by telling an incident which occurred recently, of a kind of which I have had a few, but not many experiences. For my private hospital I have a rule that when a patient is admitted she must go to bed immediately. A lady with an ovarian tumor arrived after a journey of some hundreds of miles, and was asked by the nurse told off for her to go to bed. She said she would not do so till she had seen me. The nurse assured her that I would not come near her till she was in bed. The patient remained obstinate, and I sent a message to her that she must either go to bed or go home again, and she elected to do the latter, with much satisfaction to myself. She doubtless thought, and you may think, the rule in question is an absurd one, but the absurdity is only on the surface. It is a test of the patient's obedience and confidence in me, and I know very well that with a patient who begins by disputing my orders and doubting the wisdom of my directions I never could get on, and therefore it is better for both that we should have an early parting. My nurses I always train myself; in fact, I will not have one who has had previous experience, for I know very well that such a woman will inevitably, to save herself trouble, do something in a way she has seen done elsewhere, and probably for some purpose altogether foreign to my intention, and will therefore become to me a source of danger and annoyance.

Finally, I give great personal attention to cleanliness in every detail of my work. I trust no nurses or servants without over-looking; and I am constantly and at unexpected times turning up carpets, taking down shelves, and routing out cupboards. In this way and by a process of weeding I have obtained a large staff of good servants, and have founded a large establishment in which every available precaution is secured. I can give no other reasons than these for my success, and probably they will commend themselves to you.

There are, however, some causes intrinsic to the work itself, from which the success has sprung to a large extent, of which a few words may here be said with advantage. The first, of course, is the discontinuance of the clamp, of which I have said a great deal elsewhere. Whatever Sir Spencer Wells may say to the contrary, neither with nor without Listerism would any body go back to the clamp. But the curious thing is that there are recent experiences in hysterectomy which would make it appear that it is not so much the clamp which has been to blame as Sir Spencer Wells's way of using it. Hysterectomy must always be a more serious operation than ovariectomy. Yet Dr. Bantock is now obtaining better results in removing the uterus with a clamp than Sir Spencer Wells ever got in removing simple ovarian tumors; and we must bear in mind that Sir Spencer always insisted that he used the clamp for his simplest cases—cases with long and easy pedicles.

Puzzling over the mysterious and startling contrast, I went to see Dr. Bantock operate, and among other things I found that he had given up using perchloride of iron for the purpose of tanning the stump. I asked him why he had done so, and he told me he was quite sure the use of the perchloride of iron had added greatly to the mortality of the clamp, because with a thick pedicle secured by the clamp it is impossible to close accurately the abdominal wound and prevent draining into the cavity. I did not at once accept Dr. Bantock's explanation, but I determined to use the perchloride of iron no more. Like every body else, I was prejudiced in favor of the statement made by Sir

Spencer Wells, that a putrefying stump would poison the wound, and therefore I could not make up my mind to allow it to remain without some kind of interference. Years ago, in blaming the clamp for our high mortality, I had pointed out the likelihood of this incomplete closure as being one of the causes, if not the chief cause of death. But I certainly did not suspect the perchloride of iron as being the fatal agent. A few days after my interview with Dr. Bantock I had to perform a hysterectomy, and I dressed the stump with crystals of thymol. The patient died of peritonitis on the fourth day, and that the thymol had trickled into her peritoneum and had poisoned her we had proof enough. Since then, I have done hysterectomy twice without dressing the stump at all, and the patients are at present perfectly well. It will be curious, indeed, and no less instructive, if we find that Dr. Bantock is right, and that the use of perchloride of iron—the only contribution Sir Spencer Wells has ever made to abdominal surgery—should turn out to be the cause of his tremendous mortality. In any case, it is a remarkable example of how absurdly we are all governed by *à priori* statements—statements absolutely void of any arguments in support of them, but having been made by some one with an authoritative name and position, are accepted without doubt. If Dr. Bantock's brilliant results are obtained by others in the same way, then we have been going on destroying women with perchloride of iron merely because Sir Spencer Wells said we should use it.

As the whole aspect of abdominal surgery is at the present moment controversial, as the progress and practice of this part of our art form the chief objects of my life, you need not be surprised if I have made this address somewhat of a polemic. The greatness of the opportunity, the fact that an address given to you will be read where mere utterances of mine would be passed by, obliged me to take advantage of the opportunity you have given me to carry on the discussion. The course of this particular line of work has, as you know, taken a sudden bound of activity within the last few years, and the reason is

a very simple one. The immense success in the removal of ovarian tumors such as threatened to destroy life with absolute certainty which followed the efforts of Mr. Baker Brown and Dr. Keith, led some of us—myself especially—to venture into regions where life was not necessarily, or at least not apparently threatened, but where suffering was persistent and incurable, and where the sufferers had been proved by protracted trial to be outside the powers of ordinary remedial measures. In a recent paper by Sir Spencer Wells, published in the Medical Times and Gazette, the argument is completely dislocated, and put in an altogether *ὕστερον προτερον* fashion, and therefore I must here give a little attention to the views of that writer. He tells us that ovariectomy had at one time a mortality of seventy or eighty per cent, but I know not whence he gets his information. Doubtless it would be possible to find occasional examples of surgeons with limited experience having such a heavy death-rate, but such an isolated case would not yield a fair statement of the facts. I read a few months ago in an American medical journal that in Italy there had been one hundred cases operated upon, with sixty-three deaths; and the newspaper recorded the fact that “thirty-four surgeons were engaged in the sanguinary work.” But when the work of men who can be called ovariectomists is examined, no such results are seen. Charles Clay was the first man who did an ovariectomy in England, and his maximum of mortality in his first series of cases was forty per cent, but it speedily fell to twenty-five per cent, and this is very much what has been recorded by Sir Spencer Wells of his own practice.

In the paper of which I am speaking, Sir Spencer goes on to say that “afterward, when the strictest hygienic precautions were supplemented by antiseptics and improvements in operative details were generally adopted, success became so great that ovariectomy not only took its stand as by far the most successful of any capital operation in surgery, but the risk attending it in a favorable case could truly be calculated as little, if at all, greater than that attending any case of natural childbirth, and, as a nec-

essary consequence, early operations could be advised with less hesitation." The statements in this sentence are wrong from beginning to end. In the first place, the mortality of ovariectomy in the hands of Keith and myself still remains at or about three per cent, and we have shown the least mortality yet available. The mortality of natural labor, on the other hand, is certainly not .25 per cent. The statement that diminished mortality has led to early operations should be exactly reversed, for it is the early removal of tumors and discontinuance of tapping which have largely contributed to our present splendid results. Sir Spencer Wells's teaching inculcated the practice of tapping and its repetition until the patient was within measurable distance of the grave, but his successors have reversed all this with infinite advantage to their patients, and we now look upon tapping as a sort of surgical crime. This material alteration in practice led us step by step in the direction I have previously indicated, and we began to discuss the greater advantage to which I have just alluded. Every specialist is familiar with a large class of miserable women who wander about from hospital to hospital, or from consulting-room to consulting-room, seeking relief from their ailments unavailingly.

Let me take the first class to which Sir Spencer Wells alludes in his recent paper—cases of uterine myoma. There can be no doubt that there are hundreds of uterine tumors that give no trouble at all, but these are not the cases that come to us. If a woman has no pelvic trouble she does not present herself to the gynecologist, and if she has a uterine tumor which gives rise to no symptoms, that tumor of course remains undiscovered; but when she suffers from distress occasioned by pressure on viscera, from severe hemorrhage or increasing size, she comes to us and asks for advice. Suppose we find her to be suffering from a uterine myoma, what are we to do? The answer to this question is like the answer to every other of a similar kind: each patient must be advised according to the circumstances of her case. If the tumor is small and the woman comparatively near her climacteric, and the hemorrhage such as can be moder-



ated by a rest in bed and the use of ergot, then she should be advised to let the tumor alone. But if the woman be not near her climacteric, and the hemorrhage does not yield to treatment—especially if after a fair trial of treatment the tumor is found to be actively going on—then surgical treatment is demanded.

Of course, every practitioner of medicine and surgery does and always must carry on his work in his own way, and there can be no doubt that within certain limits the measure of his success stamps the rightness or wrongness of his methods. James Syme used to teach us that there were three methods to conduct our professional business, but that there was only one way to real success. He said there were three interests involved. First in order, that of the patient; second, that of the professional colleague; and, third, that of the practitioner himself. Syme insisted that the several interests should be rigidly kept in the order in which he placed them, or things would be sure to go wrong. I have never heard sounder advice, and have never lost sight of it, and, so far as within me lay, I have striven to follow it. In the proposals of a new proceeding two dangers clearly occur: the first, that of the enthusiastic upholder of the novelty, who may be disposed to run too fast in the new line; the second is that of the obstructive, who, merely a believer in the times that are past, can see no possibility of their improvement. The remedy for the first danger is a wholesome skepticism leading into just and careful criticism; the remedy for the second is more difficult, for it involves a patient endurance of much misrepresentation and a protracted combat upon the points of criticism which have no weight in themselves, and have an importance gained only by persistent reiteration. In the line of practice of which I am about to speak, the point most persistently urged against our new line of practice is that unnecessary operations are performed. Now this is an argument which it is extremely difficult to argue upon, because those who speak on the two sides of the question start from altogether different standpoints. Those of a past generation, like Sir Spencer Wells,

apparently regard it as justifiable to perform operations in this department of abdominal surgery only when life is pronouncedly in danger; whereas, on the contrary, we of the younger school believe we are justified in extending our practice for the relief of suffering, and we regard this as a higher function than that of the mere saving of life. To end the discussion of this point I would point out that our critics endeavor to apply an arbitrary rule for the repression of abdominal surgery which has never yet been applied in any other department of the art. Let me ask, if we find a man suffering slightly with the early symptoms of small calculus, do we not at once proceed to relieve him by removing it from his bladder? In fact, in the domain of what is called general surgery, has it not become an established practice to perform operations which are accompanied by very considerable risk of life merely for the rectification of deformities, such as bow-leg and knock-knee, which have not the remotest risk of life attached to them and which involve no kind of suffering? The ultimate court of appeal, therefore, comes to be the patient's own decision, and I do not find that patients prefer to go on suffering pain and the disabling effects of profuse loss of blood rather than submit to a surgical operation, the details and effects and ascertained risks of which are completely and candidly placed before them.

In the treatment of uterine myoma two alternatives occur, and these are both the subjects of very hot discussion on my own side of the Atlantic, they are removal of the uterine appendages and removal of the uterine tumor itself by the so-called supra-vaginal hysterectomy.

No one in Europe, at least only one authority so far as I know of any importance, doubts that removal of the uterine appendages arrests menstruation completely in the great majority of instances, arrests the growth of uterine myoma generally, causes it to shrivel up, and in many instances actually to disappear. Mr. Knowsley Thornton, Dr. Savage, Professor Hegar, myself, and others have reported numerous cases in detail. I have published a long series in *The American Journal of the*

Medical Sciences for January, 1882, but Sir Spencer Wells dismisses us all in the brief sentence, "Vague, unsupported assertions have little influence upon the opinion of a thoughtful or a skeptical profession." Sir Spencer Wells must pass his retirement in some other way than in perusing the modern literature of his specialty, and therefore his criticism need hardly engage our attention seriously.

The great majority of cases of uterine myoma which come to us for surgical treatment can be quite satisfactorily dealt with by removal of the appendages, and it is an operation having a small and steadily diminishing mortality. The arguments used against it are, first, that of its mortality, but this mortality is the inevitable death-rate of early work, and it is, therefore, not a permanent objection. It was an objection urged twenty-five years ago against ovariectomy, but against that operation it no longer holds good. The second objection is that myoma itself is not a fatal disease, but this is not an argument in harmony with my own experience. Even if it were a just one, however, it is admirably met by a plea entered at Ryde, in the discussion of my paper on the subject, to the effect that it is to the rights and relief of the majority that we must have regard, and that the function of our profession does not end with the saving of life, but it is chiefly that of relieving suffering.

Two other objections have been urged generally against the removal of uterine appendages, that it sterilizes the patients, and destroys their sexual appetites. Of course, a woman is completely sterilized by a uterine myoma ninety-nine times out of one hundred, so that the process of complete destruction of fertility is a matter of little moment. The other objection has been shown to be perfectly groundless, and even if it were not so, it could hardly be urged on the ground of morality that a woman should go on suffering because she ought not to suffer any diminution of that animal propensity which it is the chief object of the higher life of all religious culture to subject, and the subjection of which forms for all creatures the greatest difficulty of existence.

There are cases of myoma demanding surgical treatment on which removal of the uterine appendages seems to exercise no satisfactory influence. Mr. Knowsley Thornton has made a very valuable suggestion, one which certainly deserves very careful consideration, that all cases of myoma requiring interference should first be subjected to removal of the uterine appendages and then to subsequent operation if it should be found necessary. The only objection to this that I can offer at present is an incomplete one. I have pretty well satisfied myself that there is one form of myoma on which removal of the uterine appendages exercises no control, a variety which I have named the soft edematous myoma. But it is not easy to recognize this form of myoma until it has been removed. Again there are a few cases, very few I have found them to be, in which the appendages can not be removed, and we must proceed to hysterectomy. Finally, the removal of uterine tumors has had such brilliant results in Bantock's hands, that I am in hope that a new era for hysterectomy has been opened out.

Another class of cases wandering about seeking relief, is that upon which I have operated in large numbers, and have found chronic and incurable disease of the appendages in the form of chronic inflammation of the ovary, chronic inflammation and occlusion of the tubes, these latter being occluded and distended by serum, pus, or blood. When I first published my work on this subject, there was, of course, a large amount of incredulity expressed about it, and this incredulity was not much lessened by the exhibition of a large number of specimens at various societies, and their permanent exhibition in the museums of the colleges of surgeons. Many, particularly among my metropolitan brethren, loudly asserted that there were no such diseases, and Sir Spencer Wells stated, at the International Medical Congress in London, that if such diseases did occur, they must all go to Birmingham. But Dr. Kingston Fowler has shown not only that they exist in London, but that they are far more fatal than I had any idea of, and that they have been and are overlooked and misunderstood in the metropolis just as

they were overlooked and misunderstood in my own practice previous to 1878. Concerning this incredulity, please distinctly understand that I do not blame any one for it; it is a necessary part of all human progress. I do not even blame my metropolitan brethren, as they seem to think I do, for not discovering these cases and properly treating them. That is the fault of the mechanical school of gynecology established by Simpson, and which exercises a far too great influence over this department of our art. During the last twenty years displacements have had a great run, just as before that time every thing was put down to ulceration, and no man considered himself properly armed for the treatment of disease unless he carried a speculum and a caustic stick about with him in his gig. The mechanical school revels in the sound and the pessary, both useful enough in their proper places, but when misused are capable of endless mischief, for many of the so-called misplacements are now known to be constituted by chronically inflamed and adherent tubes and ovaries, capable of relief only by their removal.

You will ask me at starting to tell you how these diseases may be recognized, and I have to answer that their diagnosis can not now and probably never may be a matter of certainty. They begin generally in some acute attack of pelvic inflammation, from which the patient dates all her troubles, and when you get such a distinct history you ought at once to be on your guard. This illness may have arisen, for instance, in a clearly defined and confessed attack of gonorrhea, or it may be an attack of pelvic perimetritis occurring after a miscarriage or a labor, or it may have arisen in one of the exanthematic fevers or a simple cold. In some of the cases, however, you get no clear starting-point in the history, and then the diagnosis is generally more difficult. The symptoms are usually precise enough, yet unfortunately none of them is peculiar to the condition of which we are speaking. Pain is, of course, a leading feature, as indeed it is rarely without pain as a chief incentive that patients consult us at all. This pain is complained of as being constantly present, greatly aggravated by walking and becoming intense for

some hours or days before the period and lasting throughout its continuance. Menstruation is usually too frequent and too profuse. In the great majority of the cases the uterus is somewhat fixed, and a tender mass can be felt at one or other side of it, perhaps on both sides, and behind it. When the tubes and ovaries are down behind the uterus and adherent there, and this is by far the most common condition, the diagnosis to a beginner is extremely difficult. Nothing looks more certain and easy than the diagnosis of subinvolution and retroflexion, and without further consideration a pessary is introduced, with no further result than that of aggravating the patient's sufferings; in fact, I may say that at this point her troubles will begin to be serious, and she will wander about collecting various kinds of instruments from various practitioners until she ends either a helpless or hopeless invalid, or dies from an attack of acute peritonitis.

In some of my most marked and most successful cases there have been no physical signs at all, and I have felt myself reluctantly justified in interfering only by the manifest reality of the patient's sufferings.

Here let me just say a word about the much discussed question of subjective symptoms. Every body has heard of the celebrated story told of Liston, that a hysterical girl persuaded him to remove a healthy limb for supposed disease of the knee-joint; but is there any other story of the kind known? If there is I have not come across it. We certainly do meet with women who will tell incredible stories about their sufferings, but the stories are so inconsequent and contradictory that there is no difficulty in discounting them. Besides, they have no support from the presence of corresponding physical signs. A woman whose sufferings are real has a sequent narrative and will submit to treatment, while the woman who is a humbug flies off at a tangent the moment a suggestion is made that she should submit to an operation in which she risks her life. I have never yet known a woman submit to an abdominal section in whom I did not find abundant justification for its perform-



ance, even in cases in which I had been extremely doubtful about its real necessity before I undertook it. I have known many patients to whom I have made the proposal as a test of their reality, and who, much to my satisfaction, have speedily taken themselves off to some other practitioner.

As to the details of the operations in these cases I have no time here to speak; indeed, I could deal with them satisfactorily only in a series of lectures. Suffice it to say, that the operations are very difficult, for the structures are always extremely adherent and the operator has nothing to guide him save the erudition of his touch. Concerning the cases of occluded and distended tubes, some of my critics have suggested, without any experience, that something short of abdominal section might suffice for their successful treatment, such as tapping the tubes from the vagina; but a trial of this proceeding long ago satisfied me of its impracticability and its uselessness, and my growing experience constantly confirms me in the conclusion that we have no alternative.

I am often asked concerning the subsequent history of these cases, and I am able to say, from the published details, that the great majority of them are relieved at once and completely by the operation. In some of them there remains a tenderness of the stumps, lasting for some months. In four very bad cases fecal fistulæ had formed, and in two the sinuses have healed and the patients are perfectly well. In the third case the fistula opens still at occasional intervals, and in the fourth case, by far the worst I have ever had, the patient being literally at death's door when the operation was performed, the fistula still remains open, some twelve months after the operation, and even here her health has so greatly improved that I am hopeful of its permanent closure in time.

I have occupied your time already at too great length, and yet have left myself no time whatever to speak of a great variety of topics within the limits of the subject of my address of which I fain would have spoken—subjects entirely novel, and full of the deepest interest alike to the practical surgeon and to him



who takes but an interest of a literary kind in the progress of our art. In fact, it is a matter of regret to me that I can not address such an audience as this in a series of lectures rather than in an address which must necessarily be brief. It is one of the great defects of a position such as I hold—a defect inherent in a special line of practice—that it practically shuts out its follower from any chance of being a teacher. Besides, I feel this strongly as acting to my own prejudice, and I am certain it is a misfortune that those who, like myself, are very largely engaged in work strictly limited to a department can never communicate as successfully the results of their experience as can those who are engaged in teaching. I regret, therefore, that I must pass over without mention the important field of new work which has been opened up within the last few years in the surgical treatment of the liver, spleen, kidney, and intestines. I can not even stop to speak of many other less striking, but no less important subjects, such as the treatment of pelvic abscesses by abdominal section and drainage, though all these are of less importance, in so far that they excite but little hostility; and what I have to say to you further I purpose to limit to a brief discussion of a proposal, made by Dr. Robert Battey, for the production artificially of the menopause for the purpose of indirectly benefiting patients suffering from conditions more or less neurotic, the symptoms of which are apparently influenced by the recurrence of menstruation.

It must be perfectly clear to the most casual observer that this is a field of an extremely ill-defined character, one which at first sight offers but very intangible prospects of success, and in which the indications even of success must be very vague and indefinite. There can be no doubt that a large number of women suffer in such a way as to make it perfectly clear that if they were relieved from recurrent menstruation they would be improved; but there can be no doubt that the application of this idea—in itself a brilliant one—requires the utmost care. I have no sympathy with stupid obstructionists who, because they scent danger in the air, would absolutely prohibit its application; but

I have sufficient regard for the expression of every kind of professional opinion to recognize the necessity for the full exercise of caution.

When the proposal was first made I recognized this so fully that I selected for whatever experiments I should make in this direction, a disease concerning the reality of which there could be no doubt whatever—I mean epilepsy. It is a perfectly easy thing to recognize by two facts alone any case of genuine epilepsy from mere hysterical imitation. It was, I think, Dr. John Hughes Bennett who clearly established the facts that none but the true epileptics ever seriously hurt themselves during the attacks, and that after the fits are over the epileptic is always somnolent. It is certainly the case that in a large number of cases of epilepsy in women the incidence of the disease is concurrent with menstruation. It is also true that every epileptic woman whose case I have investigated is worse during the menstrual week than at any other time. In some cases the epilepsy is absolutely limited to those days of the month during which the menstrual flow is in existence. It was, therefore, a perfectly easy thing to select a number of cases in which the experiment of Battey's operation seemed capable of justification.\* For the purpose of trying the experiment I selected six cases, and to these I have absolutely limited its application, though from the number of patients who have been sent to me for the specific purpose of having the operation performed, I suppose I might have been able by this time to have placed several scores of attempts on record. The reason of my careful restriction has

\* Dr. Thallon, of New York, has lately published an article in Seguin's Archives, which is an admirable illustration of the Teutonic process of elaborating a camel from the inner consciousness of the writer. Dr. Thallon seems never to have read what either Dr. Battey or I have written on this subject, and he has created a new term, against which I desire to enter a vigorous protest. He speaks of the "Battey-Tait" operation. There is no such thing. Dr. Battey's proposal is as different in its purpose, in its details, and in its application from my own as lithotomy and amputation. I need not enter into the further details of Dr. Thallon's criticism and conclusions, as they are reached solely by the utter absence of experience of the matters on which he has chosen to write.

been that I do not care to prejudice the results of my other work by complicating it with what seemed to me a doubtful kind of proceeding; but all my care has been to some extent fruitless, for I have been persistently charged by a certain class of writers with having performed a large number of useless and unnecessary operations in removing normal ovaries in women suffering from nervous disorders. Indeed, so late as July 5th last, Sir Spencer Wells wrote the following sentences, which, though they may have been intended for some one else, I can not help but suspect were leveled at me. They run as follows: "Just now something more than a word of caution against rash, dangerous, and unnecessary operations is called for. We are startled by the reports of the removal of normal ovaries of young women suffering from nervous disorders, which may be exaggerated or imaginary; and it is to be feared that our professional honor is at stake, and that abdominal surgery in its latest developments is open to the denunciation hurled against the early ovariologists; and that, with more reason than in 1850, Lawrence's question must be repeated, whether such operations can be encouraged and continued without danger to the character of the profession; and West's assertion that the fundamental principle of medical morality is outraged can not now be satisfactorily refuted."

Though I am fairly familiar with the literature of abdominal surgery during the last ten years, I am absolutely ignorant of any thing which can possibly justify such ridiculous exaggeration. I have publicly challenged Sir Spencer Wells to indicate the proceedings to which he alludes, and to produce the evidence upon which he bases his charges; but up to the moment of my leaving England he had not taken up the gauntlet. It is a somewhat remarkable fact that in another journal, in the same month, the same writer actually pleaded in favor of the removal of tubercular lungs; that such an operation would be justifiable if it saved one patient in twenty of those operated upon, and it seems to me absolutely impossible to reconcile such a recommendation with the denunciation I have just read.

So far as my own work in Battey's operation is concerned, in not a single one of the six patients operated upon were the uterine appendages normal. In two of them, typical examples of cirrhosis, the pathological anatomy was carefully investigated by independent observers, one of whom was the well-known and accomplished pathologist, Mr. Alban Doran, by whom the appearances were fully described and figured in the *British Medical Journal* for November 8, 1879. The results of these operations, in the first place, were that all the patients made easy and uninterrupted recoveries; the operations were performed after the most careful consultation, and with the full cognizance on the part of the patients and their friends of the results which were certain, and the entirely speculative nature of those it was hoped would be obtained. As I have already published the cases in detail, with the exception of the last, which was performed only a few weeks ago, I need not here repeat them save in general terms, and that is to the effect that in two cases the results are such as to justify completely the proceedings. In both of these the disease before the operation was so intense that it was threatening life, but now it is almost entirely subdued, and the health of the patients has been enormously improved. In one case the disease was entirely arrested for a year and a half, and, though it is now returning, the patient has been transformed from a wretchedly feeble, anemic, and broken-down girl into a healthy and robust woman, although affected by epilepsy almost as badly as before. In two others the disease has been greatly modified, and the health of the patients has been immensely benefited.

From this brief record, it is quite a matter open for discussion as to whether the continuance of the proceeding can be recommended, and I am bound to say that I have not myself a very strong opinion in the affirmative; but I think if I had a daughter with feeble health, the result of pronounced menstrual epilepsy, I think I would advise her to have the operation performed. From what I have seen of it myself, I think there can hardly be any risk about it, and if performed with the precau-

tions I have indicated, I do not think it can be brought under the sweeping category of Sir Spencer Wells, as being either rash, dangerous, or unnecessary.

There is another argument, and I think one that may be said to have some moral force, in that, as it will assist in the prevention of the distinctly pronounced hereditary tendency of the disease, we should at least hesitate before we entirely condemn it. Certainly a great deal more can be said for it than for the proposal of pneumonotomy for phthisis, on the assumption that the removal of a lung would only save one patient out of twenty. Removal of the uterine appendages for epilepsy would probably not kill more than one per cent; and I am certain it would materially relieve fifty per cent; it would improve the health of the great majority of patients, and I do not think it would make any of them worse than they were before the operation. I am hopeful, therefore, that the verdict of professional opinion will not be adverse to a fair and reasonable trial of Dr. Battey's proposal, and I trust that the freedom from the prejudice and shackles of tradition which we find on this side of the Atlantic will secure for it a fair field.

TREATMENT OF CHOLERA.—Surgeon McFarlan, of the British Army, writes in the *Dublin Journal of Medical Science* as follows: There are four principal plans of treatment I have seen adopted and practiced myself:

1. The calomel and opium treatment.
2. The salt treatment.
3. The belladonna treatment.
4. The permanganate of potassium treatment.

There are many men of experience who still believe in calomel and opium, two or three grains of calomel with half a grain or a grain of opium every two or three hours, with stimulants, but no water, unless mixed with spirits, sinapisms, and hand-rubbing. I can not say any thing in favor of this plan. I have seen many cases recover under it. Some cases will recover in spite of any treatment, as some will die; but I think the treat-

ment adds much to the agony of the disease, and if it does not hasten the patient to the grave, does not smooth the passage. I think it may be laid down as a rule that opium should never be given once collapse sets in.

The second is the salt treatment, and there are two ways I was recommended to use it: One is, common salt, two drams; bicarbonate of sodium, thirty-six grains; chlorate of potassium, ten grains; water, eight ounces; to be taken every half hour or hour, according to the symptoms. The other way is, half an ounce of common salt in a pint of water every half hour or hour. Why bicarbonate of soda is used when the secretions are alkaline I do not know. I should feel inclined to substitute dilute hydrochloric acid; but certainly I have seen the mixture act very successfully, and more so than the plain salt and water. One would imagine either of these a nauseous draught; but any one who has seen the avidity with which a cholera patient will suck down the last drop thinks otherwise. Of the salt I have heard the doubtful recommendation, "that more cases of cholera have recovered with the salt treatment, and more cases have died, than under any other," and I can not speak more clearly of it.

The third plan of treatment is that by belladonna. The form recommended is one fourth grain of extract of belladonna with two grains of sulphate of quinine, in a pill freshly made up, every half hour or hour, till reaction is established. I treated three or four cholera cases with belladonna; one patient by it and no other medicine. For three days he suffered terribly, and was in a state either of collapse or of fever. I certainly felt that in belladonna I had the means of bringing him out of collapse, and controlling it; but when the drug was suspended he became collapsed again. Each time reaction set in it was accompanied by a mulberry-colored rash and high febrile symptoms, and the difficulty was to prevent the collapse coming on again. He made a good recovery ultimately. The belladonna treatment requires constant watching, is very trying to the physician, but I think is a method of treatment worth knowing of.



The fourth plan of treatment is a permanganate of potassium. This is certainly the most successful I have seen. The late Surgeon-Major White employed it always, and it was from him I learned it. I think he first saw it used in Bulgaria. It has many things to recommend it. In the first place, you can carry a small bottle in your waistcoat pocket, sufficient to treat hundreds of cases, and no other medicine is necessary; in the next, it is a pleasant remedy. From beginning to end there is nothing in the treatment to cause apprehension to the patients or add to their sufferings. The plan Dr. White adopted was to give a teaspoonful of a palatable solution of the pure salt every ten minutes regularly, until reaction was established, and then give beef-tea, etc. One grain to four ounces of pure or distilled water is the strength of the solution. The salt must be pure, and the solution must be renewed if it become discolored, as it sometimes does. The first time I saw it used I had been treating a soldier with the salt solution from early morning till 9 A. M., and he was sinking fast. Dr. White then relieved me till I went to breakfast, and on my return I found my patient with reaction well established. I saw Dr. White treat several cases with the permanganate, and certainly I have never treated a case in any other way since, and I have had several sporadic cases. I treated one case for six hours before any material sign of improvement took place, and after sixty doses reaction became thoroughly established, and the patient made a good recovery. At the same time another man was attacked, and his symptoms were relieved in less than two hours. With the permanganate treatment the patient may drink water freely, or, what I think better still, meal and water, *warm*. The only thing is not to give the drink just on top of the permanganate, but wait three or four minutes, which the patient will willingly consent to do. One medical officer gave it in one-quarter-grain doses; and this caused a burning sensation to the patient's throat and added to his sufferings. The dose I mention is the proper dose; if more than a teaspoonful is given it is rejected, like every thing else. The first symptom relieved is the sickness, then the thirst, then



the heat returns, purging and cramps cease, and after some hours the kidneys act. I think in the case of children it would be a valuable treatment, if any thing would; and I do not see why a young child might not get the same dose as I have named for an adult.

Of accessory treatment—and first of *drinks*: To withhold water from a cholera patient is, I think, the height of cruelty. Except it be to arrest the sickness of stomach (which it is doubtful if it does) I do not see why ice is so much recommended. The mouth, tongue, and breath are cold, as is the surface of the body, and the temperature, as shown by the thermometer, is much below normal. True, patients will munch any amount of ice, or drink any amount of water, but they will drink salt and water with as much avidity, and I have found they will enjoy warm meal and water just as much. It is fluid they want, to supply the loss of water in the blood, and they will take it in any form. I put a good handful or two of oatmeal in a can of hot water, and let them drink as much of as they like warm.

Sinapisms are useful sometimes over the heart and epigastrium. Hot bottles to the feet, sides, etc., are of great use.

*Hand-rubbing.* This is often done very roughly. As the patient shouts out to rub hard, the cuticle is soon rubbed off the legs, which are most effected with cramps, and this adds much to the suffering afterward from contact of the bed-clothes. The proper way is for the assistant to lubricate the hands well with warm oil, and to knead, press, and squeeze the affected parts rather than rub them.

*Injections.* I heard of one medical officer who had good success from injecting, per rectum, large quantities of decoction of logwood warm. I have never tried injections, but I would be inclined to try large quantities of a dilute solution of permanganate of potash, warm as the patient could comfortably bear, or large quantities of salt and water, with chlorate of potash, well diluted and warm.

*Bleeding.* I saw one remarkable recovery after bleeding. One night during the height of the epidemic in 1862, at Alla-

habad, two patients were brought to the hospital, as bad almost as they could be. It was before I saw the permanganate treatment. I tried the salt treatment, gave them champagne, put on sinapisms, etc. They rejected every thing given by the mouth. I had heard of three cases in gaol of natives who had been treated by venesection and recovered. I opened a vein in the arm of the worst case of the two men, but could only squeeze out a few drops of black blood, like tar. I then opened a vein in the other arm with the same result; the man would not bleed. I left him and was attending to the other case, when some one came to me to say the man was bleeding profusely. I bound up his arms pretty quickly; reaction returned; he turned over on his side and went to sleep, and never had an unfavorable symptom afterward. As he had other treatment, I will not say positively it was the bleeding that saved him, but, humanly speaking, I believe it was. I tried it in two or three cases afterward, but not sufficiently. I did not give it a fair trial. It was by accident the successful case bled so profusely.

*Stimulants.* I believe in the non-stimulant plan of treatment; at the same time, if a patient had a craving for alcoholic stimulants, I do not know that I would withhold them; but I have never observed this craving, rather the reverse. If I did give stimulants, it would be what the patient was accustomed to.

Without venturing to recommend it confidently, I incline to the permanganate of potassium treatment; and yet I must make an important admission—namely, that I have never seen it tried at the commencement of an epidemic. I have seen it stated that at the commencement of an epidemic nine tenths die, in the middle one half, and at the close nine tenths recover. If this be true, the permanganate can hardly be more unsuccessful than any other treatment at the commencement of an epidemic. I have seen the permanganate used when an epidemic was pretty near its height, and in several sporadic cases since, and I prefer it to any treatment I have yet seen. Neither would I like to let a patient die without trying venesection. A little blood from the arm might relieve embarrass-

ment caused by the right side of the heart being unduly loaded and turn the tide in his favor, and if the patient does not bleed there is no harm done.

NEW METHOD OF TREATING ASIATIC CHOLERA.—S. S. Todd, M. D., of Kansas City, writes, in the Journal of the American Medical Association: All cholera cases in their incipency, and all *mild* cases throughout the attack, should be treated with opiates and astringents, and *hot* water, acidulated with sulphuric acid, should be allowed and urged upon the patient, to the utter exclusion of ice, ice-water, and all ice-cold drinks. Whisky, wine, or brandy may be added if the patient be much prostrated or be suffering from fear, but in moderate quantities only. The abdomen should be covered with a large mustard poultice, and the feet should be kept warm.

In a more advanced stage of the disease and in all severe cases, from the outset, no time need be wasted with opiates or astringents, as they will do little good. Collapse is now imminent, and the hot drink should now be given more assiduously than before, and repeated again and again if the stomach reject it. The body should be kept as warm as possible with bottles of hot water or other appliance, and no rubbing allowed, if the patient can be otherwise kept quiet, as it limits the advantage to be gained from application of heat, an important consideration. Ice and ice-cold drinks, contra-indicated in all stages, are most hurtful in this, and however grateful to the patient, and however eagerly craved, should be rigorously denied, as tending to cause or aggravate an already existing algid condition.

It is now that the hypodermic syringe is to prove useful, if at all. Large quantities of a fluid should be injected, at short intervals, composed of distilled water, to which has been added a small quantity each of chloride of sodium and chloride of potassium, and such an amount of *alcohol* as may be deemed requisite, the solution to register 98° F. when ready for use. These injections should be repeated at intervals of one or two hours, the interval, the quantity of alcohol, as well as the whole

amount of fluid used, to be regulated by the amount of serum waste, by the degree of prostration, and by the size, age, and sex of the patient. A syringe of four-ounce capacity may be had of Tieman & Co., New York.

ALBUMINURIA.—Sir Andrew Clark, in a paper read in the section of medicine, at the British Medical Association, said: I think that, in the present state of knowledge, the discussion of structural is of less interest and of less importance than the discussion of functional albuminuria, to which I shall confine the few observations I have to offer.

To the use of the term "functional," many general and some just objections will be raised. It will be urged that every lesion of function must have its correlative lesion of structure; and that, to use any term which appears to deny this fact, or fails to give it at least implicit recognition, is at variance with the principles of science and constitutes a backward instead of a forward movement in knowledge. To the logical coherency and force of this argument I make no objection; but I contend, as often before I have contended, that mere local integrity is not in such matters the final test or measure of truth, which, in the present state of knowledge, can sometimes be reached only along lines which seem, as we understand them, at present to be illogical. And in no way could this paradox be better illustrated or more strongly enforced than by a critical study of what is called functional albuminuria. It is, I venture to say, certain that, in the kidney giving rise to albumen in the urine, there occur states—mechanical, physical, chemical, and, in a provisional sense, vital—which are neither tangible nor visible, which not only can not be estimated, but are even, by the most delicate instruments of research, incapable of recognition; states which may often come and go, disordering function and disturbing health, and yet leave no abiding marks of their presence and actions. Such states are different in manifold ways from organic states, and must be so named as to insure recognition of their fundamental differences. For this is not all that has to be said concern-

ing these functional states. We are so much concerned with anatomical changes; we have given so much time to their evolutions, differentiations, and relations; we are so much dominated by the idea that, in dealing with them, we are dealing with disease in itself, that we have overlooked the fundamental truth, that these anatomical changes are but secondary, and sometimes the least important, expressions or manifestations of states which underlie them. It is to these dynamic states that our thoughts and inquiries should be turned; they precede, underlie, and originate structural changes; they determine their character, course, and issues; in them is the secret of disease; and, if our control of it is ever to become greater and better, it is upon them that our experiments must be made.

I say, therefore, that those functional affections of the kidneys attended by the presence of albumen in the urine are of the utmost importance to the better understanding of organic disease, and deserve a more prolonged and critical study than they have yet received.

Of the forms of functional albuminuria with which I am practically acquainted, I shall mention four as worthy of further consideration. They are the nervous, the oxaluric, the hepatic, and the gouty. I leave on one side the functional albuminuria of cold and the various forms of peptonuria connected with indigestion.

The first two forms occur chiefly among adolescents; the latter two are found for the most part among elderly people.

I am as sure as I can be about any thing incapable of demonstration, that all strain of nervous system, especially under emotional excitement, is capable of producing functional albuminuria. Among twenty men entering a competitive examination no one is albuminuric; at the close of the examination, lasting a week, three are found to have albumen in the urine. A gouty man with moderately healthy urine attends a political meeting and delivers an exciting speech. Soon afterward a little albumen is found in the urine; but in a day or two it disappears. In a fortnight he delivers another speech in circum-

stances of great excitement and the albumen reappears in the urine.

The most numerous illustrations which I have met of functional albuminuria have occurred in young men aged from eighteen to thirty, whose urine was of a high density and loaded with oxalate of lime. To put the matter in another way, I have not very often followed carefully a case of "oxaluria," with high density and an excess of urea, without finding sooner or later traces of albumen in the urine. This is by far the most interesting and instructive of cases. Illustrations of the hepatic group occur for the most part in middle-aged men. There is congestive enlargement of the liver with catarrh; the portal system becomes loaded; the skin is dry and icteric; and then, without any appreciable change in the urine beyond the presence of a little bile, albumen appears in it. With the subsidence of the hepatic trouble the albumen disappears from the urine.

Temporary albuminuria in gouty persons whose kidneys are as yet structurally unaffected is common enough in certain conditions. When the balance between ingoing and outgoing is disturbed, when the blood becomes loaded with excrementitious stuffs, when there is increasing vascular tension, with restlessness, feverishness, dry skin and headache, then, as a common rule, traces of albumen appear in the urine.

**TREATMENT OF ALBUMINURIA.**—Dr. W. R. Thomas, of Sheffield, gave to the British Medical Association his views on this subject in the following brief way:

*Treatment of Acute Cases.* If we keep in mind that the disease has been produced by this excessive work, we shall naturally try to relieve the kidneys as much as possible. We should take care that the skin is kept warm and clean, that its action should be increased, if necessary, by warm or vapor-baths. The bowels should be kept open daily. Only a sufficient quantity of food should be given, or the kidneys will have too much work to do.



*Treatment of Chronic Cases.* I believe that, if we can ascertain what the cause of the disease is, we do much toward the cure. We should, I think, see that excess of food or drink is not taken, that the mind is not worried or overworked, that the skin or other organs are acting properly, that the kidneys are not compelled to do excessive work; that, if there be hereditary disposition to gout, excessive care be taken with regard to diet; that any organs which may be inefficient in their functions be assisted by remedies if possible; that above all the skin be kept warm and clean by proper clothing and sponging; that the general health be improved by exercise, proper diet, regular hours, and remedies which may be called for by the state of the patient, such as iron, the several tonics, antacids, etc.

Dr. Myrtle (Harrowgate) said, in the treatment, he thought, in chronic cases, the best course to adopt was to place the patient in the most favorable position as regards climatic surroundings, to choose an even, genial, and, if possible, a dry locality, where the skin and lungs might be allowed free play; and this of itself would prove the best remedy, the most certain means of retarding the progress of degeneration if it could not effect a cure.

**SALICYL TREATMENT OF ACUTE RHEUMATISM.**—Dr. MacLagan, in his address on therapeutics, delivered before the British Medical Association, said among other things: You all know how the treatment of rheumatic fever has been revolutionized by the introduction of the salicyl compounds. In the history of therapeutics there is probably no instance in which a new method of treatment has had its advantages so rapidly and universally recognized. In your experience you know, at least those of you who have given the remedy in adequate doses know, that under this treatment the duration of fever and pain in an uncomplicated case of acute rheumatism is a matter of hours rather than days, and you enter on the treatment of such a case with the certainty of being able to rapidly subdue the symptoms and cure the disease. The results of the earlier



observers were so remarkable that they naturally created a feeling of skepticism as to their accuracy; and no wonder, for it was rather startling to be told that we could cut short in twenty-four hours a disease whose natural duration under the best possible treatment had been measured by weeks. But further observation tended only to confirm this; and within a year of its introduction this method of treating acute rheumatism was all but universally adopted, and the statements of the original observers confirmed in all quarters of the world. The salicyl treatment of acute rheumatism does not consist simply in giving salicin and salicylic acid; it consists in giving one of these in large and frequent doses; but in the statistics hitherto published are included many cases in which the dose given was so inadequate that the disease was practically allowed to run its natural course; and yet these cases are instanced as cases treated by salicin or salicylic acid.

When the method of giving the salicyl compounds in large and frequent doses—of giving as much as you can instead of as little as you can—has been fully accepted and acted upon, and when the history of the salicyl treatment comes to be written by our sons, statistics may prove a ready and useful means of demonstration. Meantime that history is being made.

The treatment of fever by cold is an old practice which has been revived of late years. Its resuscitation is mainly due to Brand, a German army surgeon, who has published some very remarkable statistics to show that by this treatment the duration of and mortality from typhoid fever can be greatly lessened; and that, if begun sufficiently early, by the third day the course of the disease may be arrested.

Such a very remarkable statement can not be accepted without a complete examination of the facts on which it is founded, and at the very commencement we are met by an objection which shakes all our confidence in the accuracy of Brand's statements and in his reliability as an observer; for when he tells us that the best results are got in cases in which the treatment is commenced by the third day, the questions naturally

arise in our minds: How does Brand come to see typhoid fever at so early a period of the illness? and, having seen it, how does he diagnose it? I am quite sure that in this country not one case in ten thousand is ever seen at so early a period. I am equally sure that no physician would venture to make the diagnosis of typhoid fever at that early stage of a febrile attack. So slight are the early symptoms, and so invidious the onset of the malady, that the patient rarely applies for advice before the sixth or seventh day, and the features characteristic of the disease so tardily develop that a diagnosis can rarely be made before the end of the first week. These are established facts in the history of typhoid fever; and when we find Brand coming forward with statistics in which these facts are ignored, we are bound to receive his statements with all reserve.

Let me tell you of two cases which came under my notice last week. A gentleman had been ailing for a couple of days; he had headache, malaise, some aching in the limbs, and loss of appetite; his pulse was 100, his temperature  $102.2^{\circ}$ ; there was no local inflammatory mischief, no apparent cause for the rise of temperature. I sent him to bed and gave him a light diet and half an ounce of liquor ammonia acetatis every two hours. On the following day (the fourth of his illness) the temperature was  $99.6^{\circ}$ ; on the next day it was normal, and he was well. Brand would have told him that he had typhoid fever, would have put him in a cold bath, and included the case in his statistics.

A few days ago I saw a boy, aged fifteen, on the third day of an illness which commenced with headache and a feeling of cold. His pulse was 104, and his temperature  $102.3^{\circ}$ . There were no local symptoms. He was put to bed and given a teaspoonful of Mindererus' spirit every two hours. The next day his temperature was  $100^{\circ}$ , and on the following day normal. Brand would have treated the case heroically by the cold bath, would have given the credit to the cold bath, and included the case in his statistics.

These are cases of which we all see dozens every year. I

instance these two only because they occurred last week. In civil life, and especially among the poorer classes, the majority of such cases recover without ever being seen by a medical man. In military practice they are all seen and treated. Brand, as a military surgeon, has seen a great many of them, and unfortunately has included them in his statistics as cases of typhoid. What reliance can be placed on the statements of a man who makes such a mistake as that? If any English military surgeon had come forward with such statements and such statistics they would not have received a hundredth part of the notice which has been accorded to Brand's, and would long ago have been set aside by the profession in this country as worthless; they are none the less worthless because they are of German origin.

On the practical results of the cold-bath treatment of typhoid fever I have at present nothing to say. I wish only to indicate the misleading nature of Brand's statistics, and point them out to you as another and prominent instance of how little reliance can be placed on statistics as a means of therapeutic research. (The British Medical Journal.)

ANTISEPTIC TREATMENT.—Professor Esmarch (Kiel) thus described the plan of treatment followed in his hospital practice (British Medical Journal): The aim was the avoidance of supuration, and the leaving of the wound undisturbed. This was best done by a permanent dressing, preventing the entrance of germs. The things required were: (1) Exact hematoses; (2) the avoidance of cavities in the interior of the wounds; (3) drainage, artificial ischemia, the application of numerous catgut ligatures upon large and small vessels, and the application of a bandage before the removal of the tourniquet, support of all the deep parts by pressure, turning in of the edges of the skin, and pressure. Drainage-tubes, as preventing healing, were not now used by him, but openings were left for the escape of exudation. Asepsis was minutely studied. The bandages were sterilized by dry heat and corrosive sublimate. The spray was

used only before operating, so as to disinfect the air in the room. In one operation distilled water with salt, of the specific gravity of the blood, was used for irrigation, but at the end corrosive sublimate was employed. Other antiseptics, as iodoform, were occasionally used. For bandages, loose absorbent soft matter was needed. Peat was used in pillows (without macintosh) dipped in carbolic lotion. The parts were rendered immovable by glass splints until healing by the first intention was obtained. This occurred in from four, eight, ten, or fourteen days to five or six weeks after operation.

Dr. Mosetig-Moorhof (Vienna) advocated the iodoform treatment of wounds, and said that he used no other antiseptic. He used cold water during operations. There was no irritation, and asepsis was certain. Iodoform prevented transudation of the white blood-cells. He narrated a case of traumatic septic gangrene extending above the knee, where yet the knee-joint was found aseptic at the post-mortem examination. Iodoform also diminished pain.

Dr. Schede (Hamburg) said the principle of antiseptic treatment remained unaltered, although the methods had changed. After his training in Halle, when called to Berlin, he found Lister's method perfect in its results; but in Hamburg he never had perfect success with Listerism; he was now unable quite to exclude accidental wound-disease from his cases. The hospital was old, and in many respects undesirably arranged and situated. He tried iodoform with good results. He had also tried corrosive sublimate, and, after experience, had got from it brilliant results. Erysipelas at once disappeared; not one case had occurred under the sublimate dressing in his wards; no septicemia, no pyemia, no irritation. He used it in the proportion of one to five hundred, and had had no case of poisoning. Sometimes, however, there was tenesmus of the rectum. Children especially tolerated the sublimate well. In the dressings he tried to keep every thing dry.

Dr. Mikuligz (Cracow) did not agree with either Dr. Mosetig-Moorhof or Dr. Schede. In his hospital, which was much

worse than Dr. Schede's, he had had no erysipelas with iodoform; but iodoform could not be used alone. Other soluble substances must be used where its insolubility prevented it from fulfilling the indications. He disinfected with a solution of carbolic acid, or of corrosive sublimate, and used no spray; in the vagina he plugged the canal with iodoform gauze; in the rectum he stitched one side and the upper end of the sphincter, and used no drain, even when the peritoneum was opened. Poisoning occurred only from excessive use.

Dr. Neudörfer (Vienna) said the aims of antiseptic surgery were the same, but the methods varied, and must vary, very greatly. Each surgeon was satisfied with his own plan, and really got good results; but statistics were not of much value. Surgeons must study rather in the direction of sepsis. Sepsis required water; therefore he used no water in his treatment of wounds. He used no sponges, but a dry towel crumpled together to wipe up the blood. He used for wounds peroxide of hydrogen, and had found singularly good results.

Mr. Schelkley (America) said that the tendency to sepsis, etc. was different in different cases. His practice was in the tropics. At first he used thorough Listerism; he never, however, got healing by the first intention, but always slight sloughing of the surface, and union by the second intention; yet there was no pus, nor any pain. He then changed the plan, ceased to use the spray, and irrigated during the operation with salicylic acid or corrosive sublimate, and used iodoform dressing or boracic lint. Salicylic acid and iodoform gave the best results, yet he did not get union by the first intention.

Dr. Koeberle (Strassburg) said that for some time he had used only linen to wipe wounds, and had since had no erysipelas among his operations. He claimed to have had better results than Schede; even his ovariectomies were all cured.

Prof. Plum (Copenhagen) said the Danish surgeons agreed entirely with Germany, but he could not support Esmarch's plan, on account of the cost. The chief antiseptics were soap and brush, and by simple means much might be done.

Dr. Trélat (Paris) said that he had three years ago laid down the following rules: The wound should be made of a form suitable for healing by first intention, and perfectly adapted. No foreign body, either mechanical or septic, should be left in the wound. Antiseptics did not exist in some countries; not on the top of Chimborazo; and half-educated Americans did remarkable operations on negroes. The principles of antiseptics were not altered; the practice was being perfected. He used iodoform gauze, chiefly as plugs, and superficially as required. He applied a large cushion, pressed with elastic bandages to the wound, changing the dressings on the fifteenth day.

LISTERISM.—Of all the advances which have been made in modern surgery, there is none to be compared in the immensity of its results, none which has been such a boon to humanity, as that antiseptic system of treatment with which the name of Sir Joseph Lister is associated. What does it owe to statistics? Nothing, absolutely nothing; and Sir Joseph Lister has wisely abstained from wasting time in the collection of statistical details which could be of no use, as they could not demonstrate more satisfactorily than has already been demonstrated the extent of the benefits derived from the antiseptic system. But his opponents have endeavored to show by statistics that as good results were got without the use of antiseptics, that Sir Joseph Lister's precautions were uncalled for, and his results no better than those got before his treatment was introduced. But every impartial observer knows that he is right and they are wrong; that, under the antiseptic treatment, as taught and carried out by Sir Joseph Lister, lives can be saved which, but for it, would be lost; and the attempt to show the reverse by statistics serves only to demonstrate that which I wish to impress upon you, that, of all our guides, statistics are the least reliable—of all means of therapeutic research, that on which least dependence can be placed. (*The British Medical Journal.*)



### **Notes and Queries.**

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ON THE INTERNATIONAL COLLECTIVE INVESTIGATION OF DISEASE.—Sir William Gull delivered the annual address on this subject at the International Medical Congress at Copenhagen, in August last. We make from it a few extracts and wish our space permitted us to give the entire address :

The purpose we have before us is no less than this, to enlarge and methodize intellectual co-operation, whereby not only the active, but the at present inactive, faculties of observation of the wide-spread members of our profession may be combined into one or more lines of energy. I am not unmindful how much this presupposes; how it assumes the combination of exact observation and record with refined criticism and analysis; how it demands the highest scientific perception with the humble collection of the meanest facts; how, in fine, it means the development of intellectual combination into many forms of organization which should be not one but many instruments of research. Such a forecast may, perhaps, lead us to exclaim, "Who is sufficient for these things?" Yet happily the answer is near; time, though short for the individual, is inexhaustible in the race; the intellect is in its infancy, its powers of growth unexhausted; and to these, in their evolution, there appears to be no limit. The work to be done is unchangeable; and there are eager and willing workers in all lands, who only need the encouragement and direction of the master minds of medical science to set them to work.

Happily the phenomena which demand our investigation, though complicated and transient, are, it need not be said, the result of unchangeable laws. The capriciousness of Nature, as we speak of it, is but the weakness of our own sense and



understanding, and its so-called mystery and obscurity but the darkness in ourselves.

The physiologist and pathologist have to admit that not even in the caprices of man is there capriciousness; that mental caprices have their organic basis; that the whims, the fancies, and the prejudices of the human mind, not less than the changing activities of the functions of his body, or the revolution of the earth on which he lives, are but the result of unvarying laws, unchangeable as the fixity of the stars on which he gazes with wonder and admiration.

We may therefore have this encouragement, that, when any of our work is done, however small and trifling it may seem, it is done and settled for all time, or at least so long as the laws of organization remain what they are; that the clearing of a fact in respect of disease will remain an imperishable inheritance of knowledge to those who follow us, so long as there is disease in the world. We may support our labors, therefore, with a feeling of surety that the problem before us is a settled problem, however difficult its solution. Nature will not delude us, however much we may delude ourselves.

The student of medicine occupies a unique position in the pursuit of knowledge. For instance, if I turn the leaves of the programme, I find that the Section of Anatomy invites attention to cell-nucleus and cell-division, the lowest unit of organization; and the Section of Psychiatria to the psychic-epileptic equivalent, which, as no one will deny, stretches to the other pole of knowledge; hence, surely no man more needs to lay hold of the unchanging idea of law than the student of medicine, as he ranges from one extreme of observation to another.

The thoughts of the student of medicine must, therefore, range from the atoms that build up the textures to the hopes that make the man. And even perhaps further than this; for in most of us the unsatisfied mind can not answer itself with the measurables and ponderables of physical science, however much it may admit that all else is dependent upon them, but will strive to go behind appearances and feelings to the substratum of their

existence, and can not find rest for its foot until it traces their relation to an unchanged first cause.

Du Bois-Raymond might well remark that the problem of organization would be comparatively easy, if it were unattended with feeling and thought; that it would then, as it were, present us only with an astronomical problem, in which the atoms of things would, after the manner of the heavenly bodies, move on in their several orbits in lines which science might hope to deal with. For it is within the scope of science, even as we now understand it, to track an atom of oxygen, nitrogen, hydrogen, or carbon through its synthesis in a plant to its combination in the elements of brain or muscle, and still on to its resolution and return into its original form, with corresponding evolution of force. But when this shall have been done, we have learnt nothing of pain, nothing of emotion, nothing, indeed, of the science of many of the common facts with which medicine has to deal every day. How different would be the problem to the physician if disease were unattended by pain or emotion, if the patient were indeed patient as unorganized materials are; if there were no hopes or fears on the part of the object to be dealt with, and no embarrassment on the part of the practitioner from desire to please as well as to heal! Quacks would then be banished to limbo. The course of nature could be watched until the equilibrium of health was attained, and the temptations to polypharmacy would be no more. But then, on the other hand, we should have nothing to do with life in its higher form, which is our ever-abiding problem, and we should miss the stimulus of affection which, like a constant trade-wind, carries us forward—at least the majority of us.

The family physician or practitioner has a sphere of observation specially favorable to the study of etiology and modes of extension of communicable diseases. He has also special advantages for pathological study, which are not so much afforded to the professor in a university or hospital. It is his privilege to see the earliest beginnings of disease, and to have the opportunity of tracing its evolution and decline; or, when so favorable

a course does not happen, the steps of pathological progress are before him; whereas, at the end of life, when the whole organism crushes downward into a chaos of pathological forms by the advance of disease, it is often impossible on the post-mortem table to say where failure began, and how it has advanced. The family physician's observations should thus supply a corrective to a too exclusive mechanical pathology.

Among the subjects suggesting themselves to us in England in near relation to this matter was the formation of life-histories and family-histories in respect of disease; and these could only be obtained through the family physician. If such histories could be widely and accurately recorded, the natural associations of different forms of disease in individuals and families would be made evident, and might afford suggestions as to pathological relations not now suspected—relations between diseases which are separated in nosological treatises, but associated in Nature. This mode of inquiry, through family-history, would open a wide page for the record of the pathology of ailments, a page than which there is none more interesting to the practitioner of medicine, since seven tenths of his work, and perhaps more than this, lie in efforts to correct physiological deficiencies, and to maintain some near approach to the equilibrium of health, which a feeble organism unaided can not reach.

One can hardly forecast the amount of good influence on therapeutics if, instead of individual assertions respecting the value and success of this or that drug or method, we had the teaching of calm and impersonal results deduced from an international area of inquiry so large that the individual observer would be lost in the result.

There is but one caution, and that lies against our attempting too much at first. In our scientific ambition it would not be difficult to o'erleap ourselves. It is by a little well done that we shall do much; whereas, if our deductions be hasty, incomplete and unfounded, the authority which will naturally attach to these researches will be much more obstructive to the cause of science than the fallacious dogmas of separate individuals. If

our hopes and prospects are encouraging, the steps we take can not be too wary, The purpose of our association could only lead to failure, and, perhaps, even a gigantic failure, if the movement were not waited upon by strict caution and exact criticism. If the work proceed at the present rate, a few years will witness one of the greatest and most useful movements in modern times. The founding of an International Collective Investigation of Disease will promote the national movements of the same kind in all countries, and will give a stimulus to international emulation under the happiest form.

*Editor American Practitioner:*

THE INDIANA STATE MEDICAL SOCIETY.—Among the very interesting papers read before the Indiana State Medical Society, and published in the September number of the *American Practitioner*, there is one, that by the President of the Society, about which I wish to say a few words. In the address referred to Dr. Munford gives much space to the discussion of a higher medical education, and, as is the prevailing fashion, harps upon the old old string of a more complete and higher primary and classical education. Now every one knows, that where a young man obtains a thorough training in our colleges and higher schools, it will enable him more easily and perfectly to master and comprehend the great scientific truths and facts, as taught in the better equipped medical schools of the country. But it is not practical or possible for one half of those who study medicine intelligently, and who do make of themselves able and successful practitioners, to obtain a thorough literary or classical education. And then, good sound sense, with a gift or great liking for the study and practice of medicine, is better than all the college learning in the world. Yes, a gift; how came Dr. Gross, or any other surgeon to become distinguished in surgery, if it was not from the fact that he had a liking for it, and an aptitude for the study and practice of the heroic art? Why, the biggest fool in the class of '49-'50, in the old University of Louisville, was a college-bred boy, and your excellent

father would not let him graduate without a promise to study one more year before he commenced to practice medicine.

No, let us not fume and fret over what we can not help. The best plan is to let all study medicine who want to, if they but be sensible and apt to learn, whether they can read Latin or not. I heard that great old man, Drake, one day make a Latin quotation, and then remark to the class, "Some of you know whether that is correct or not, for I do not, as I am not a Latin scholar."

Professor Miller, you know, was a country-bred boy, and said he got his education in an old-field school, often sitting up in the boughs of the trees to study his lesson. And who were greater than these?

The more doctors there are the fewer quacks there will be. There are grades in every calling, in every profession, in every walk of life; degrees of success in every thing, in medicine, in law, in theology, in poetry, in painting, in all the mechanical arts, in every thing.

Our profession has been now for many years harping on the subject of a higher medical education, and in point of fact is it more advanced now than it was when you and I graduated, thirty-five or forty years ago? I believe the best plan would be for our medical colleges to adopt the old custom of two year's study and two courses of lectures, and then to reject all who are not qualified for the practice of medicine.

The Indiana Society certainly had a full benefit on the subject of malpractice. I would say to our Indiana brethren, they might apply themselves with advantage to educating the people at large. We certainly have nothing of the sort down South. Our people are either too proud or too honorable to sue a faithful doctor when he has done his best to relieve them. Come South, brethren, and learn a lesson in chivalry.

One word on the case of post-partum hemorrhage reported by Dr. Hibberd. The Doctor's practice was good, for it succeeded; but I think a little sprinkling of cold water upon the face after the syncope has lasted a few seconds, as a general

course, would be the best. And then let the patient drink plentifully of cold water and other fluids to fill up the empty blood-vessels.

We want no law in Tennessee to regulate the practice of medicine. Free medicine, our motto. The survival of the fittest.

J. W. DAVIS, M. D.

SMYRNA, TENN,

*Editor American Practitioner:*

HOT WATER IN CHOLERA MORBUS.—I have recently treated a few cases of cholera morbus with large injections of water, as hot as can be borne, and by hot water as a drink, with the most satisfactory results, even in cases attended with severe cramps.

From the good results observed in these cases I would not hesitate to use hot water in the treatment of true cholera. Might not the hot water, injected through a long rectal tube, enter the blood-vessels, and thereby to some extent compensate for the loss of the watery portion of the blood, even in the collapse state in true cholera?

LEVIN J. WOOLLEN, M. D.

VEVAY, IND.

CHANGES IN MEDICAL JOURNALS.—The Pacific Medical and Surgical Journal and the Western Lancet have united and will appear hereafter under the former title. The founders of the two publications, Dr. Gibbons, sr., and Dr. Whitwell, both able journalists, will remain as editors. We trust the profession of the Pacific coast will sustain what will assuredly be a first-class periodical, not only with their purses, but lend to its pages that practical interest which so many of them are capable of doing, if they will but use their pens in its service.

The St. Louis Medical and Surgical Journal, edited for many years past by that indefatigable worker, Dr. Rumbold, has passed under the editorial charge of Dr. LeGrand Atwood, Dr. Rumbold retiring. Drs. H. Christopher of Missouri, Wm. A. Byrd of Illinois, and A. E. Prince of Illinois, are the associate

editors. In such hands our valued contemporary can not fail to acquire a still stronger hold upon its numerous readers.

The Weekly Medical Review has added *Journal of Obstetrics and Diseases of Women* to its name, in order to cover a special department devoted to these subjects and edited by Prof. Geo. Engelman. Dr. Engelman is specially fitted for the work he has undertaken, and the Review, long one of the very best of our many exchanges, will present hereafter fresh attractions to its host of friends.

THE FUTURE OF SURGERY.—Mr. Jackson, Lecturer on Surgery at the Sheffield (England) School of Medicine, recently gave an address on *A Quarter of a Century's Surgery*, etc., which he concluded as follows: "I am inclined to think that, in future, we shall find surgery stepping in and dealing successfully with ruptured bladders, perforating ulcer of the stomach, and kidney diseases; but I do think we ought to make a stand against performing large operations on internal cancers until we know more about their laws of recurrence. I think we ought to watch with very great jealousy the results of our osteotomies, our abdominal sections, and drainage of pulmonary vomicae. We ought to try to find out what is the best treatment for spinal diseases and diseases of bones and joints in their early stages; to invent some more satisfactory way of treating fractures; and to publish more of our unsuccessful cases."

Perhaps the most valuable point in the foregoing is to be found in the last sentence.

THE STATE BOARD OF HEALTH OF TENNESSEE.—Dr. C. C. Fite, the former very efficient Secretary of this Board, having resigned the position, Dr. J. Berrien Lindsley has been appointed in his stead. A better selection could not have been made.



## **Bibliography.**

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- Text-Book of Medical Jurisprudence and Toxicology. By John J. Reese, M.D. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street. 1884.
- The Formation of Poisons by Micro-Organisms. A Biological Study of the Germ Theory of Disease. By G. V. Black, M. D., D. D. S. Philadelphia: P. Blakiston, Son & Co., No. 1012 Walnut Street. 1884.
- Diseases of the Heart and Thoracic Aorta. By Byrom Bramwell, M. D., F. R. C. P. E. With three hundred and seventeen illustrations. New York: D. Appleton & Co., Bond Street. 1884. [All rights reserved.]
- The Diseases of the Spinal Cord. By Byrom Bramwell, M. D., F. R. C. P., Edinburgh. Edinburgh: Maclachlan & Stewart. London: Simpkin, Marshall & Co.; Bailliere, Tindall & Cox. Dublin: Fannin & Co. 1882.
- An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M. D., London. Fifth American, from the sixth revised and enlarged English edition. With one hundred and fifty engravings. Philadelphia: Henry C. Lea's Son & Co. 1884.
- On Tumors of the Bladder; their Nature, Symptoms, and Surgical Treatment. Preceded by a Consideration of the Best Methods of Diagnosing all Forms of Vesical Disease, including Digital Exploration and its Results. With numerous illustrations. By Sir Henry Thompson, F. C. R. S., M. B., London. London: J. & A. Churchill, 11 New Burlington Street. 1884.
- The National Dispensatory. Containing the Natural History, Chemistry, Pharmacy, Actions, and Uses of Medicines. Including those recognized in the Pharmacopeias of the United States, Great Britain, and Germany, with numerous References to the French Codex. By Alfred Stille, M.D., LL.D., and John M. Maisch, Phar. D. Third edition. Thoroughly revised, with numerous additions. With three hundred and eleven illustrations. Philadelphia: Henry C. Lea's Son & Co. 1884.